



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,982	10/22/2001	Hiroki Kuribayashi	041514-5151	7217

55694 7590 11/04/2005

DRINKER BIDDLE & REATH (DC)
1500 K STREET, N.W.
SUITE 1100
WASHINGTON, DC 20005-1209

EXAMINER

AGUSTIN, PETER VINCENT

ART UNIT	PAPER NUMBER
----------	--------------

2652

DATE MAILED: 11/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/982,982

Applicant(s)

KURIBAYASHI, HIROKI

Examiner

Peter Vincent Agustin

Art Unit

2652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 1-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-13 is/are rejected.
- 7) ☒ Claim(s) 14 is/are objected to.
- 8) ☒ Claim(s) 1-14 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. Claims 1-14 are now pending, with claims 1-9 withdrawn from further consideration due to a previous restriction requirement.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 23, 2005 has been entered.

Claim Objections

3. Claim 10 is objected to because of the following informalities:

Claim 10, line 12 recites "each of said pre-pit region", which recitation is grammatically incorrect and indefinite of what is being claimed. Note that lines 7-8 recite "at least a pre-pit region".

Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
5. Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo et al. (US 6,580,678).

In regard to claim 10, Kondo et al. disclose a recording apparatus (Figure 13) for recording/rewriting information by irradiating a beam of light to an information recording medium (26) capable of recording/rewriting information (see title) and comprising a recording layer, wherein said recording layer is made of a material that changes reflectance upon irradiation of a beam of light and thereby is capable of recording information as a change in reflectance (column 1, lines 57-62), said recording layer comprises information rewritable regions (Figure 11a, element 105) and at least a pre-pit region (104) where predetermined information (60) has been written, and average reflectance of said rewritable regions is different from average reflectance of said pre-pit region (column 12, line 66 thru column 13, line 5), said recording apparatus including a circuit (Figure 13, elements 14 & 17) for generating a recording mark signal for recording a recording mark of a predetermined length, which reduces a difference in reflectance between said information rewritable regions and said pre-pit region, in each of said pre-pit region while the beam of light is irradiated on the pre-pit region (see column 14, lines 9-14).

However, in regard to claim 10, Kondo et al. do not disclose that the recording medium is a multi-layer information recording medium comprising a plurality of recording layers sequentially layered through spacer layers.

Official Notice is taken that both the concept and advantages of multi-layer information recording media comprising a plurality of recording layers sequentially layered through spacer layers are notoriously old and well-known in the art. It would have been obvious to have used a multi-layer information recording medium for the apparatus of Kondo et al., the motivation being to provide a recording medium with increased data storage capacity.

In regard to claim 11, Kondo et al. disclose a circuit for detecting said rewritable regions and said pre-pit region (understood from column 8, last line: "optical detector").

In regard to claim 12, Kondo et al. inherently disclose a circuit for detecting a portion that makes the average reflectance of said pre-pit region different from the average reflectance of said rewritable regions (column 14, lines 9-14 teach that the ratio of the maximum reflectance of the ROM area and the maximum reflectance of the RAM area is preferably in the range 0.9-1.10, i.e., the reflectances are substantially equal. This suggests a mechanism that detects whether the reflectances are substantially equal or not, i.e., the claimed "circuit for detecting a portion that makes the average reflectance of said pre-pit region different from the average reflectance of said rewritable regions").

In regard to claim 13, Kondo et al. disclose a circuit for detecting the recording marks already recorded in said pre-pit regions (understood from column 8, last line: "optical detector"); and a circuit for, when no recorded recording marks are detected, controlling an optical pick-up to record the recording marks in said pre-pit region (inherent: the ROM region is initially blank before the recording process; see column 3, lines 31-32: "in the ROM area, EFM information is recorded in the form of a pre-pit string"), and when the recorded recording marks are detected, controlling the optical pick-up not to over-write the recording marks in said pre-pit region (during a read operation, a beam is used having an intensity not sufficient to over-write the recorded marks).

Allowable Subject Matter

6. Claim 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and

Art Unit: 2652

any intervening claims. See the Office Action mailed May 10, 2004 for a statement of reasons for the indication of allowable subject matter.

Response to Arguments

7. Applicant's arguments filed August 23, 2005 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Vincent Agustin whose telephone number is 571-272-7567. The examiner can normally be reached on Monday-Friday 9:30-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Thi Nguyen can be reached on 571-272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Peter Vincent Agustin
Art Unit 2652


BRIAN E. MILLER
PRIMARY EXAMINER